

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MLRA REGION 11
Indianapolis, Indiana 46278

FIRST AMENDMENT TO THE
OCTOBER 1966 CLASSIFICATION AND CORRELATION
OF THE SOILS OF
SPENCER COUNTY, INDIANA

SEPTEMBER 2006

This amendment results from digitizing the Spencer County Soil Survey, the update of the NASIS database, and conforming to the Keys to Soil Taxonomy, 9th Edition, 2003.

AMENDMENT NO. 1

Pages 1 to 10 – Change the following map unit names:

<u>Map Symbol</u>	<u>Approved name (1966)</u>	<u>Approved Name - Amended (2006)</u>
Ag	Algiers silt loam	Algiers silt loam, frequently flooded, very brief duration
Ba	Bartle silt loam	Bartle silt loam, rarely flooded
Cu	Cuba silt loam	Cuba silt loam, frequently flooded, brief duration
Ha	Haymond silt loam	Haymond silt loam, frequently flooded, brief duration
Hu	Huntington silt loam	Huntington silt loam, frequently flooded, brief duration
Ls	Lindside silt loam	Lindside silt loam, frequently flooded, brief duration
Ne	Newark silt loam	Newark silt loam, frequently flooded, brief duration
Ph	Philo silt loam	Philo silt loam, frequently flooded, brief duration
Rh	Rahm silt loam	Rahm silt loam, occasionally flooded, brief duration
Sn	Stendal silt loam	Stendal silt loam, frequently flooded, brief duration
Wa	Wakeland silt loam	Wakeland silt loam, frequently flooded, brief duration
Wr	Wilbur silt loam	Wilbur silt loam, frequently flooded, brief duration
Ws	Woodmere silt loam	Woodmere silt loam, occasionally flooded, brief duration

Pages 2, 3, 4 and 6 – Change the following map symbols and map unit names:

<u>Map Symbol</u>	<u>Approved Map Unit Name</u>
From: Ak	Atkins silt loam
To: Bo	Bonnie silt loam, frequently flooded, brief duration
From: Go	Gullied land, loess
To: UID	Udorthents silty, 6 to 25 percent slopes, gullied
From: Gs	Gullied land, shale
To: UfD	Udorthents fragipan, 6 to 18 percent slopes, gullied
From: Ht	Huntington fine sandy loam, sandy variant
To: Co	Combs fine sandy loam, frequently flooded, brief duration
From: Md	Made land and Pits
To: Uaa	Udorthents, cut and filled
From: St	Strip mines
To: FbG	Fairpoint very parachannery silt loam, 25 to 50 percent slopes

Pages 2, 5, 6 and 8 – Add the following map unit symbols and map unit names:

The Map Unit Symbol and Name “Du – Dumps, mine” will be added for areas where coal is processed or stockpiled.

The Map Unit Symbol and Name “FaB – Fairpoint silt loam, reclaimed, 2 to 8 percent slopes” will be added for surfaced mined areas that have been reclaimed.

The Map Unit Symbol and Name “Omz – Orthents, earthen dam” will be added for earthen dams more than 1.43 acres in size. These areas were labeled as dams in the 1973 published soil survey.

The Map Unit Symbol and Name “Pml - Pits, quarry” will be added for areas of active or abandoned quarries. These areas were labeled as “QUARRY” in the 1973 published soil survey.

The map unit symbol and name "W - Water" will be added for water areas more than 1.43 acres in size.

Replace the Conventional Signs Legend for Cultural Features and Spot Symbols from the 1973 published soil survey, with the attached Indiana Official 37A for Compilation, Digitizing, and DMF, revised June 30, 2004.

Only the following standard landform and miscellaneous surface features will be shown on the legend and placed on the digitized soil maps:

<u>Feature</u>	<u>Name</u>	<u>Description</u>
ESO	Escarpment, nonbedrock	A relatively continuous and steep slope or cliff, which generally is produced by erosion but can be produced by faulting, that breaks the continuity of more gently sloping land surfaces. Exposed earthy material is nonsoil or very shallow soil.
GUL	Gully	A small channel with steep sides cut by running water through which water ordinarily runs only after a rain, or after ice or snow melts. It generally is an obstacle to wheeled vehicles and is too deep to be obliterated by ordinary tillage.
MAR	Marsh or swamp	A water saturated, very poorly drained area, intermittently or permanently covered by water. Sedges, cattails, and rushes dominate marsh areas. Trees or shrubs dominate swamps. Typically 0.2 to 2 acres.
MPI	Mine or quarry	An open excavation from which soil and underlying material are removed and bedrock is exposed. Also denotes surface openings to underground mines. Typically 0.2 to 2 acres.
ROC	Rock outcrop	An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock. Typically 0.2 to 2 acres.
SLP	Short, steep slope	Narrow soil area that has slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.
WET	Wet spot	A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils in the surrounding map unit. Typically 0.2 to 2 acres.

Only the following ad hoc features will be shown on the legend and placed on the digitized soil maps:

<u>Label</u>	<u>Symbol ID</u>	<u>Name</u>	<u>Description</u>
UWT	44	Unclassified water	Small, natural or man-made lake, pond, or pit that contains water, of an unspecified nature, most of the year. Typically 0.2 to 2 acres.

Soil Survey Area: _____

State: Indiana _____

FEATURE AND SYMBOL LEGEND FOR SOIL SURVEY

Date: APRIL 2006

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
SOIL SURVEY FEATURES		CULTURAL FEATURES (Optional)		HYDROGRAPHIC FEATURES (Optional)	
SOIL DELINEATIONS AND LABELS		BOUNDARIES		Drainage end (Indicates direction of flow)	
STANDARD LANDFORM AND MISCELLANEOUS SURFACE FEATURES		National, state or province	— — — — —	Unclassified stream	— — — — —
Bedrock escarpment		County or parish	— — — — —		
Nonbedrock escarpment		Minor civil division	— — — — —		
Gully		Reservation (Military)	— — — — —		
Levee		Land grant (Optional)	— — — — —		
Short steep slope		Field sheet matchline and neatline	— — — — —		
Blowout		Public Land Survey System Section Corner Tics			
Borrow pit		GEOGRAPHIC COORDINATE TICK			
Clay spot		ROAD EMBLEMS			
Closed depression		Interstate			
Gravel pit		Federal			
Gravelly spot		State			
Landfill		LOCATED OBJECTS			
Marsh or swamp		Airport (Label only)			
Mine or quarry		Davis Airport or Airstrip			
Rock outcrop					
Sandy spot					
Severely eroded spot					
Sinkhole					
Slide or slip					
Spoil area					
Stony spot					
Very stony spot					
Wet spot					
AD HOC FEATURES (Describe on back)					
LABEL	SYMBOL ID	SYMBOL	LABEL	SYMBOL ID	SYMBOL
DCS	1		CRD	23	
DKS	2		MIA	24	
QVW	3		CGM	25	
YMS	4		HIL	26	
EAS	5		STI	27	
WAS	6		STD	28	
SAS	7			29	
CAF	8		MUC	30	
CAL	9			31	
SLR	10			32	
DUM	11			33	
BRV	12			34	
BRW	13		MRL	35	
BRD	14			36	
OSR	15			37	
SSR	16		SAM	38	
LSR	17			39	
WDP	18		VSE	40	
SSR	19			41	
COB	20			42	
CNS	21			43	
FES	22		UNT	44	

**Page 10- Add the following Notes to Accompany Classification and Correlation by Byron Nagel,
MLRA Project Leader**

Alford Series

This soil was classified a Typic Hapludalf as noted in the April 1973 Soil Survey Report under Table 8-Classification of the soil series. Since then the Alford soils have been re-classified to the Ultic Hapludalf subgroup. Although no base status data is known to exist for Alford soils from Spencer County, data for the Alford soils in the MLRA is dominantly in the Ultic Hapludalf subgroup. Therefore, the Alford soils in this county are also considered to be in the Ultic Hapludalf subgroup.

Algiers Series

This soil, as noted in the April 1973 Soil Survey Report under Table 8-Classification of the soil series, is classified as a fine-silty, mixed, nonacid, mesic Aeric Fluventic Haplaquept. The revised classification is Aeric Fluvaquent. This soil is considered to be a taxadjunct.

Bonnie Series

The Atkins soil, as noted in the April 1973 Soil Survey Report under Table 8-Classification of the soil series, fit the concept of the Bonnie series, therefore Atkins soils are re-correlated to the Bonnie Series.

Combs Series

The Huntington, sandy variant soils in the *Ht* map unit fit the concept of the Combs series and with this amendment correlate to the Combs series.

Cuba Series

This soil, as noted in the April 1973 Soil Survey Report under Table 8-Classification of the soil series, is borderline to the coarse-silty PSC. These soils will need to be investigated in future maintenance of this survey.

Fairpoint Series

This series is correlated for the surface mined areas. The non reclaimed areas mapped previously as the *St*, Strip mines map unit are correlated to the *FbG* map unit. Areas mined and reclaimed since the 1973 published Soil Survey Report are correlated to the *FaB* map unit.

Haymond Series

This soil, as noted in the April 1973 Soil Survey Report under Table 8-Classification of the soil series, is noted to have more sand in units along the Anderson River. In the update of Perry County, both Haymond and Wirt soils were mapped on the Anderson River flood plain. These soils will need to be investigated in future maintenance of this survey.

Markland Series

The Markland soils in the MkB2, MkC2, MIB3, and MIC3 map units fit the classification and concept of the Shircliff series. These Markland soils in these map units will be re-correlated to the Shircliff series in future maintenance of this survey and are considered taxadjuncts to the Markland series for this amendment.

Pekin Series

The Taxonomic Unit of the Pekin soils description notes a weak fragipan and coarse prismatic structure. These soils are considered to have Fragic Soil Properties rather than a Fragipan. They classify as Fragiaquic Hapludalfs, and therefore are taxadjuncts. Base status of these soils is unknown and will need to be investigated in future maintenance of this survey

Philo Series

This soil, as noted in the April 1973 Soil Survey Report under Table 8-Classification of the soil series, is noted to dominantly be in the coarse-silty PSC. Philo series are taxadjuncts, and will likely be correlated to another series in future maintenance of this survey.

Princeton Series

These Princeton soils may be in the coarse-loamy PSC and fit the concept of the Alvin Series. These soils will need to be investigated in future maintenance of this survey.

Rahm Series

The Rahm OSD Type location is in Spencer County, and is noted in the 1973 Soil Survey Report as being dominantly in the fine-silty PSC. The Type Location was examined in 2005 with samples collected, but not analyzed as of this date. Most of the soils investigated in the map unit did not fit the Rahm Series, and therefore the Type Location will be moved to a more representative area. This series borders the fine-silty and fine PSC. A Rahm soil sampled from Perry County is in the fine-silty PSC.

Sciotoville Series

The Sciotoville series in this survey were classified as fine-loamy, Aquic Fragiudalfs. The Taxonomic Unit description has the layer with the fragipan with coarse structure and a moderate to strong fragipan. Sciotoville soils described in adjoining Perry County are taxadjuncts because of having fragic soil properties (structural units average less than 10 cm). Since the 1966 Spencer County CM, Sciotoville soils have been re-classified to the fine-silty PSC. Sciotoville soils in Spencer County are considered to classify as Fine-silty, Fragiatic Hapludalfs, therefore are taxadjuncts.

Tilsit Series

Tilsit soils in this survey as the Taxonomic Unit is described fit closely with the Apalona Series (Oxyaquic Fragiudalfs). Therefore, they are taxadjuncts. These soils will need to be investigated in future maintenance of this survey.

Uniontown Series

These soils in the 1973 Soil Survey classified as Typic Hapludalfs. These soils in the UnA, UnB2, UnB3, UnC2, UnC3 map units are considered to have a water table above a depth of 100 centimeters and classify in the Oxyaquic subgroup. Therefore, they are considered to be taxadjuncts. These soils will need to be investigated in future maintenance of this survey.

Weinbach Series

These soils are considered to dominantly have fragic soils properties rather than a fragipan. Therefore, they are taxadjuncts. These soils will need to be investigated in future maintenance of this survey.

Wheeling Series

These soils in this survey as the Taxonomic Unit is described fit the concept of the Millstone Series. Therefore, they are taxadjuncts. These soils will need to be investigated in future maintenance of this survey.

Woodmere Series

These soils in this survey as the Taxonomic Unit is described and classified are in the fine-silty PSC. As of this date, Woodmere soils classify in the fine PSC. Woodmere soils sampled in Perry County are in the fine-silty PSC. In addition, Woodmere soils were sampled in 2005 from the current OSD Type Location (Vanderburg County) and are being analyzed. Woodmere soils in Spencer County are taxadjuncts.

Replace the *Classification of soil series of Spencer County* from the 1973 published soil survey with the Spencer County, Indiana Taxonomic Classification of the Soils Table on the following page -

Classification of the Soils (An asterisk in the first column indicates a taxadjunct to the series.)

Soil name	Family or higher taxonomic class
Alford-----	Fine-silty, mixed, superactive, mesic Ultic Hapludalfs
*Algiers-----	Fine-silty, mixed, superactive, nonacid, mesic Aeric Fluvaquents
Bartle-----	Fine-silty, mixed, active, mesic Aeric Fragiqualfs
Bonnie-----	Fine-silty, mixed, active, acid, mesic Typic Fluvaquents
Combs-----	Coarse-loamy, mixed, active, mesic Fluventic Hapludolls
Cuba-----	Fine-silty, mixed, active, mesic Fluventic Dystrudepts
*Fairpoint-----	Fine-loamy, mixed, active, nonacid, mesic Alfic Udarents
*Fairpoint-----	Fine-loamy, mixed, active, nonacid, mesic Typic Udorthents
Gilpin-----	Fine-loamy, mixed, active, mesic Typic Hapludults
Ginat-----	Fine-silty, mixed, active, mesic Typic Endoaqualfs
Haymond-----	Coarse-silty, mixed, superactive, mesic Dystric Fluventic Eutrudepts
Henshaw-----	Fine-silty, mixed, active, mesic Aquic Hapludalfs
Hosmer-----	Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs
Huntington-----	Fine-silty, mixed, active, mesic Fluventic Hapludolls
Iona-----	Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs
Johnsburg-----	Fine-silty, mixed, active, mesic Aquic Fragiudults
Lindside-----	Fine-silty, mixed, active, mesic Fluvaquentic Eutrudepts
Markland-----	Fine, mixed, active, mesic Typic Hapludalfs
*Markland-----	Fine, mixed, active, mesic Oxyaquic Hapludalfs
McGary-----	Fine, mixed, active, mesic Aeric Epiaqualfs
Montgomery-----	Fine, mixed, active, mesic Vertic Endoaquolls
Newark-----	Fine-silty, mixed, active, nonacid, mesic Fluventic Endoaquepts
Orthents-----	Orthents
*Pekin-----	Fine-silty, mixed, active, mesic Fragiaquic Hapludalfs
*Philo-----	Coarse-silty, mixed, active, mesic Fluvaquentic Dystrudepts
Princeton-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Ragsdale-----	Fine-silty, mixed, superactive, mesic Typic Argiaquolls
Rahm-----	Fine-silty, mixed, active, nonacid, mesic Fluvaquentic Endoaquepts
*Sciotoville-----	Fine-silty, mixed, active, mesic Fragiaquic Hapludalfs
Stendal-----	Fine-silty, mixed, active, acid, mesic Fluventic Endoaquepts
*Tilsit-----	Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs
Udorthents-----	Udorthents
Uniontown-----	Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs
*Uniontown-----	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Vincennes-----	Fine-loamy, mixed, active, nonacid, mesic Typic Endoaquepts
Wakeland-----	Coarse-silty, mixed, superactive, nonacid, mesic Aeric Fluvaquents
*Weinbach-----	Fine-silty, mixed, active, mesic Aeric Fragic Epiaqualfs
Wellston-----	Fine-silty, mixed, active, mesic Ultic Hapludalfs
*Wheeling-----	Fine-loamy, mixed, active, mesic Typic Hapludults
Wilbur-----	Coarse-silty, mixed, superactive, mesic Fluvaquentic Eutrudepts
*Woodmere-----	Fine-silty, mixed, active, mesic Oxyaquic Eutrudepts
Zanesville-----	Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs
Zipp-----	Fine, mixed, active, nonacid, mesic Typic Endoaquepts

*Fairpoint taxadjunct (Typic Udorthents) is for map unit FaB

*Fairpoint taxadjunct (Alfic Udarents) is for map unit FbG

*Uniontown taxadjunct is for map unit UnE2.

*Markland taxadjunct is for map units MkB2, MkC2, MIB3 and MIC3.

SPENCER COUNTY, INDIANA AMENDMENT NO. 1

Approval Signatures and Date

TRAVIS NEELY
State Soil Scientist/MLRA Leader
Indianapolis, Indiana

Date

WILLIAM H. CRADDOCK
State Soil Scientist/MLRA Leader
Lexington, Kentucky

Date

JANE E. HARDISTY
State Conservationist
Indianapolis, Indiana

Date